

plication of these modifications on any material or in the manufacturing process of the same require any part of the process mentioned in the following claims, the material and process should be considered included within the scope of the invention.

C L A I M S

Having described the invention, being considered a novelty and, because of this is demanded as property the content of the following claims.

1. Improvement of the thiourea solutions to leach silver and gold characterized by containing a quantity of partially electro-oxidized thiourea.

2. Improvement of the thiourea solutions to leach silver and gold, such as was demanded in the previous claim, characterized additionally by a solution which contains formamidine disulfide (FADS) produced in-situ by a controlled electro-oxidation in a proportion of 10 to 30% of the total amount of thiourea contained in the solution.

3. Improvement of the thiourea solutions to leach silver and gold, such as was demanded in either of the two previous claims, characterized additionally because the composition of the thiourea leaching solution is formulated in the same process in which the leaching solution is placed in contact with the mineral from which the metallic values are to be leached.

4. Gold and silver leaching and recovery process with partially oxidized thiourea characterized as consisting of the thiourea oxidation by the application of an electrical current in a membrane cell, where the anodic and cathodic compartments are separated, before sending the product to the leaching stage and that once concluded the leaching time, the pregnant solution, separated from the mineral residue (gangue), enters the cathodic compartment of the same electrolytic cell in which the thiourea was partially oxidized in the anodic part, where the metals are reduced and electrodeposited.